Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE GERMAN STEEL SYNDICATE.

Coal and iron are the foundations upon which national industrial greatness is based. Germany is pre-eminent in both, and in both of them there are powerful combinations. In the coal industry Germany takes the third rank among the nations of the world, but in iron and steel she is second only to the United States. In 1904 the pig iron production of the four leading countries of the world was approximately as follows: the United States 16,781,000, Germany (including Luxemburg) 10,119,000, Great Britain 8,500,000, and France 3,000,000 tons.[1] In steel production Germany has an even greater lead over Great Britain. The present position of Germany is the result of recent developments, which, though rapid, have been very steady.

The two primary natural conditions for the iron industry are ore supply and fuel. In both of these respects Germany is richly endowed. In regard to iron ore production Germany is only surpassed by the United States: in 1904 the total output of iron ore was 22,047,393 tons.[2] The coal output in 1905 (excluding lignite) was 121,190,249 tons. For iron ore production by far the most important district is the "Minette," which lies in Lorraine and Luxemburg, and extends over their borders into France and Belgium. The next most important region is on the right bank of the Rhine in the valleys of the Sieg, the Lahn, and the Dill. The production of ore in the other regions is comparatively small, the two most noteworthy regions being one in the province of Hannover and the Duchy of Brunswick and another in Upper Silesia. There are three great coal regions in Germany. The greatest is that of the Dortmund or Ruhr district, which produces more than half of the total. The next in importance is Upper Silesia, while the Saar is third. The coal deposits of Lorraine, which are nearest to the great ore deposits of the Minette, are not yet developed. The nearest district of fuel supply is the Saar, but the coal of that region is not well adapted to the reduction of ores. The Minette, therefore, must be reduced by the Ruhr coal, and an exchange is made between the two regions, the pig iron industry being about equally divided between them. The Ruhr also uses a good deal of ore from the Sieg, Lahn, and Dill districts, as well as a large amount of foreign ore. In Upper Silesia the iron ore and coal are found in close proximity, but the supplies of the former are too scanty for the industry of that region, and a large proportion has to be imported, especially from Austria and Hungary. The Ruhr coal district is not only first in the magnitude of its coal output, but also in the quality of the coal, which is especially adapted to the production of coke. In this respect neither Silesia nor the Saar can compare with it. Although the enormous iron ore production of the Minette is of a low grade, its cheapness makes up for the deficiency in iron. The Minette ore is a brown hematite with from 35 to 40 per cent. of iron[1] and from 0.04 to 1.96 per cent. of phosphorus.[2] The ore deposits are of great depth, and sometimes as much as fifty metres thick.[3] On account of its high percentage of phosphorus this ore was not much valued until the discovery of the Thomas process (basic converter). The ore of Siegerland, red hematite, contains considerable manganese, and is of a high quality.

---

[1] *Jahrbuch f. d. Oberbergamtsbezirk Dortmund*, 1901–04, p. 747.

[2] *Vierteljahrshefte zur Statistik des Deutschen Reichs*, 1905, Heft IV.: of which Prussia 3,757,651 tons, Alsace-Lorraine 11,135,042 tons, and Luxemburg 6,347,771 tons.

---

[1] Gouvy, *État actuel des industries du fer et de l'acier dans les provinces du Rhin et de la Westphalie*, Paris, 1903, p. 32.

[2] Tübben, *Die Eisenhüttenindustrie im Oberbergamtsbezirk Dortmund und ihre Versorgung mit Eisenerz. Mittheilungen ueber den rheinisch-westfälischen Steinkohlen-Bergbau. VIII Allgemeinen deutschen Bergmannstag zu Dortmund*, 1901, p. 323.

[3] Krauss, *Eisen-Hütten-Kunde*, I. Th. p. 21.

Although Germany is a large producer of iron ore, she is also a large importer and exporter. In 1904 Germany imported 6,061,127 tons of iron ore and exported 3,440,846 tons. Large quantities are imported for mixing with domestic ores. In the Rhenish-Westphalian district iron ore is used from over one hundred different places, including almost all known sorts,[1] and coming from almost all parts of the world. The usual mixture in this region is Minette, 35–40 per cent.; Swedish, 35–40 per cent.; red hematite, 10 per cent.; and other, 10 per cent.[2] In Silesia a typical mixture is said to be 27 per cent. of the local ore with 21 per cent. of cinder, 23 per cent. of Swedish, and 25 per cent. of Hungarian ore.[3] Another reason for the large iron ore imports is that there are many iron furnaces far from the domestic regions of supply, so that the foreign ore can often be delivered more cheaply.

The distribution of the pig iron production of Germany and Luxemburg is shown in the following table:[4]—

---

[1] Tübben, p. 316.

[2] Gouvy, pp. 32–33.

[3] Sympher, *Die wirtschaftliche Bedeutung des Rhein-Elbe-Kanals*, Berlin, 1899, p. 144.

[4] *Stahl u. Eisen*, February 1, 1906, p. 171.

PRODUCTION OF PIG IRON IN GERMANY (INCLUDING LUXEMBURG) IN 1905.

(IN THOUSANDS OF TONS: THUS 891 = 891,000 TONS.)

Kind.	Rhineland-Westphalia, except the Saar and Siegerland.	Siegerland, Lahn district, and Hessen Nassau.	Silesia	Pomerania.	Hannover and Brunswick.	Bavaria, Württemberg, and Thuringia.	Saar.	Lorraine and Luxemburg.	Total.
Foundry	891	177	94	155	54	28	83	423	1,906
Acid Bessemer	263	38	48	—	77	—	—	—	425
Steel Iron and other Spiegeleisen	330	283	98	1	—	2	—	—	714
Thomas or basic Bessemer	2,868	0[1]	259	—	240	133	731	2,884	7,115
Forge or Mill Iron	25	213	362	—	—	14	—	213	827
Total	4,377	711	861	156	371	177	814	3,521	10,988

[1] 3 tons only.

Looking first at the production of the different districts, it will be observed that Rhineland-Westphalia (or the Ruhr) has the largest production in 1905, and that Lorraine-Luxemburg (which includes a large part of the Minette district) is second. Together they produce over 70 per cent. of the total. Silesia and the Saar produce only about 8 per cent. and 7 per cent. respectively. If the table be examined with regard to the kind of iron produced, it will be observed that most of the iron is of Thomas or basic Bessemer steel,—in 1905 over 60 per cent., while foundry iron came second with about 17 per cent., and mill iron or puddled iron third with about 8 per cent. Acid Bessemer steel is almost negligible to-day in Germany. The bulk of the Thomas steel is produced in the German Minette or in the Ruhr, but a not inconsiderable amount is also produced in the Saar. Most of the foundry iron is produced in the Ruhr and the Minette, particularly in the former. Silesia, which occupies a very subordinate position in other respects, is the chief producer of mill iron. The two leading facts are, however, the great preponderance of the Minette and the Ruhr in the German iron industry and the predominance of Thomas or basic Bessemer steel.

The German steel industry is quite as important in the production of finished products as in the raw material. The distribution of the manufacturing industry does not correspond very closely with the distribution of the blast furnaces. Bavaria, for example, has a large machine industry, but only a trifling output of pig iron. The Minette, though it rivals the Ruhr in the output of pig iron, cannot compare with it in the output of finished products. It is only recently that the Minette has begun to develop the manufacture of rolled products on a large scale.[1] Only about one-third of the pig iron produced in the

---

[1] Bosselmann, "*Erzbergbau u. Eisenindustrie in Lothringen-Luxemburg*," *Schriften d. Vereins f. Social-Politik*, Bd. 106, p. 4.

Lahn and Dill valleys is worked up there.[1] In Silesia, however, there is an extensive output of rolled products.

Between the various producing regions there is naturally a lively competition for the German market. Especially for pig iron there tend to be developed certain natural regions of supply determined, in part, by the costs of transportation. This is distinctly the case as between Silesia and the western industrial regions. Silesia controls the supply in the far eastern provinces, where it meets western competition only in finished products.[2] Customs duties prevent it from developing its sales to any great extent into Austria and Russia.[3] For the two great western producing regions, the Ruhr and the Minette, there does not appear to be any distinct recognized division of markets, although the latter region is naturally more directed to the export trade.

Germany is a great consumer as well as a great producer of iron products, and the consumption has increased rapidly with the great development in production, population, and wealth. In 1903 the total consumption was greater than in England, although it was much below that of the United States. Reckoned, however, according to population, the consumption of England was greater than that of Germany.[4] The total consumption depends not only on the production, but also on the movement of imports and exports. Germany is both an importer and exporter of iron products. The movement for 1904 is shown in the following table:[1]—

---

[1] Heymann, *Die gemischten Werke im deutschen Grosseisengewerke*, 1904, p. 129.

[2] Kuh, "*Die Hüttenindustrie Oberschlesiens*," *Schrift. d. Ver. f. Soc.-Pol.*, Bd. 106, pp. 177, 191.

[3] *Verhandlungen ueber die Stahlwerksverbande*, Anlage 2, p. 34. As frequent reference is made to the Imperial Cartell Inquiry, the full titles of the various cartell investigations cited are here given, with short titles for reference. The Siemenroth edition is used except for the Stahlwerksverband. The general title is *Kontradiktorische Verhandlungen ueber deutsche Kartelle*. The particular investigations referred to are: *Verhandlungen ueber die rheinisch-westfälischen Roheisenssyndikat* ["*Enquete*, V."]; *Verhandlungen ueber den Halbzeug-Verband* ["*Enquete*, VI."]; *Verhandlungen ueber den Verband deutscher Drahtwalzwerke* ["*Enquete*, VIII."]; *Verhandlungen ueber den Weissblechverband* ["*Enquete*, IX."]; *Verhandlungen ueber die Stahlwerksverband, Beilage z. deutschen Reichsanzeiger*, August 18, 1905 ["*Enquete, S.V.*"].

[4] Martin, *Die Eisenindustrie in ihren Kampf um den Absatzmarkt*, Leipzig, 1904, p. 52.

	Imports.	*Exports.*
Pig iron and half-products	240,233 tons	701,985 tons
Iron manufactures	101,492 "	2,022,01 "

The chief imports were pig iron, scrap iron, steel bars, iron for ploughshares, and tin plate. The chief exports were pig iron, half-products, beams and girders, rails, steel bars, sheet bars and sheets, rods, coarse iron wares, etc. The principal foreign markets for German half products in 1904 were England and Belgium. More than half of the total was destined to England.[2] The exports of rails from Germany, on the other hand, were widely distributed, though England again was the chief market. England was also the chief purchaser for beams and girders. In regard to the official export statistics a great difficulty always exists on account of the fact that the given country of destination is not the country of final destination or consumption. The exports to Holland and Belgium are, in large part, really destined for England.

Although the German iron industry is extremely formidable in international competition, it undoubtedly finds a good deal of its strength in the existence of an effective protective tariff, which secures the home market and enables it to dump its surplus products in the world markets. The protection established for the iron trade has a vital relation to the existence of the various iron and steel combinations. Before the present protective policy for the iron trade was inaugurated, the production lagged far behind the consumption.[3] In 1878 a special committee of inquiry was appointed to investigate the subject, which almost unanimously agreed that protection for the iron industry was necessary, and this conclusion was followed by a law (1879) which imposed duties higher than those recommended, which remained in effect without substantial change down to the recent recasting of the tariff (to go into effect March 1, 1906). The duties on an ad valorem basis, both in the old and in the new schedules, amount to about 15 per cent. on pig iron, 20 per cent. on rails, 16 per cent. on sheets, and 9 per cent. on rods.[1]

---

[1] *Jahrb. f. d. O. Dortmund*, 1901–04, p. 734.

[2] *Enquete, S.V.*, Anlage 7.

[3] Heymann, p. 137.

There are a number of large iron and steel concerns in Germany which combine with the manufacture of steel the production of the raw materials, iron, ore, coal, coke. But the individual concern has ceased to be the unit in German industry to a large extent. The modern unit is the cartell. The most important matters of commercial and economic policy are determined to-day by these combinations.

Combinations in the German iron industry are of ancient date, and have assumed forms adapted to the contemporary economic organization.[2] The distinction between the early methods of combination and the modern system lies not only in the more comprehensive character of the latter, but also in the fact that the modern iron industry is established on a stupendous scale, and operates for the world market. It is often stated that the first German cartell was the tin plate combination, which was formed in 1862;[3] but this was not the first cartell even in the iron trade. Rail pools existed over fifty years ago.[4] It was not until the seventies, however, that they acquired much importance.

---

[1] Voelcker, "*L'État actuel de l'industrie sidérugique allemande et sa organisation,*" *Revue économique internationale*, Décembre, 1904, p. 734. Cf. *Der deutsche Zolltarif vom* 25 *Dezember* 1902 *mit dem auf den Handelsverträgen des Deutschen Reichs . . . beruhenden Bestimmungen*, Berlin, 1905.

[2] *Cf.* Heymann, pp. 56, 59, 60, 96, 135, 136, etc.

[3] Grossmann, "*Ueber industrielle Kartelle,*" *Jahrb. f. Gesetzg.*, Jahrg. 1891, p. 243.

[4] Kollmann, *Der deutsche Stahlwerksverband*, Berlin, 1905, p. 6.

There was an over-development of the iron industry at the beginning of that decade, and during the following depression the producers resorted to combinations to restrict their output and to maintain prices. The early cartells were generally quite limited as respects the commodities and the region included in the agreement. The first important exception to this (apart from rail pools) was the combination of German Rolling Mills, which originated in 1886 in Silesia and expanded to include the whole country. It exercised a very marked influence over the German iron trade down to its dissolution in 1893, in the face of new competition.[1] The head of this combination, Caro, declared at the time that it failed because a cartell of rolled products could not stand alone: it was necessary to cartell the raw materials and the finished products also. At that time, however, the producers of raw materials—coal and pig iron—had not been able to extricate themselves from the position into which their previous over-development had brought them. They were also facing a constant decline in prices, owing to rapid reductions in the cost of production due to technical improvements.[2] The rolling mills and the manufacturers of finer wares were in a relatively favorable situation. They often got their raw material under cost.[3] The large mixed works, or those which combined the production of raw materials with the manufacture of commercial products, complained of the disadvantage at which they were placed as compared with the straight rolling mills (*reine Walzwerke*).[4] There was no advantage at that time for a rolling mill to acquire coal mines or to establish blast furnaces, and hence the policy of combining the various stages of production, which had been quite conspicuous at an earlier period in the Ruhr district, did not find frequent illustration at this time.

---

[1] *Cf.* Caro, "*Der deutsche Walzwerksverband*," *Schriften d. Vereins f. Soc.-Pol.*, Bd. 60, pp. 43 *et seq.*

[2] *Cf.* Kestner, *Die deutschen Eisenzölle*, 1902, p. 13.

[3] Vogelstein, "*Die rheinisch-westfälische Montan- u. Eisenindustrie*," *Schriften d. Vereins f. Soc.-Pol.*, Bd. 106, pp. 81–83.

[4] Heymann, p. 149.

Fundamental changes appear in the general conditions of the industry at the beginning of the nineties. A tolerably successful pig iron cartell had been established in the Ruhr in 1886,[1] but it was not until the Coke Syndicate was accomplished in 1890 that a secure basis was formed. The iron industry was still in a weak position. In 1892 the pig iron producers of the Ruhr and the Minette got together, while a pig iron cartell was formed in Siegerland two years later.[2] The ore production in Siegerland was combined in the same year.[3] In the Minette the ore was almost entirely controlled by the blast furnaces.[4] More important than all of these was the formation of the Coal Syndicate in 1893.[5] This powerful combination dominated the whole industry during the ensuing decade. Thus the foundations were laid for a new régime in the iron trade, in which those who controlled the raw materials were to have a great advantage. The days of cut-throat competition between mining companies, in which the iron manufacturer could speculate on the demand for finished products with the assurance that the raw material would be abundant and cheap, were over. The new fuel cartells were founded on the principle of monopoly control, and the pig iron cartells partook, to some extent, of that character also. The combinations among the manufacturers of iron products did not keep pace with these developments among the producers of raw materials. The cartell of German Rolling Mills was dissolved in 1893, and no general combination appeared to take its place. The rail pool seems to have maintained a continuous existence, but the beam pool was dissolved about 1892, though reorganized shortly after.[1]

---

[1] Grossmann, pp. 240–241.

[2] Heymann, pp. 72, 152.

[3] Sayons, *La crise allemande*, p. 116.

[4] Bosselmann, p. 15.

[5] *Cf.* Walker, *Monopolistic Combinations in the German Coal Industry*, New York, 1904.

In 1894–95 a marked improvement appeared in the commercial situation in general, and in the iron trade in particular, which lasted until 1900. Although some of the earlier cartells may have been "*Kinder der Noth,*" the period of prosperity furnished apparently a healthful environment for growth.

The most important event of this period was the establishment of a half-products cartell. This innovation was a consequence of new technical conditions, and particularly the development of great steel mills for the production of Thomas or basic steel. The characteristic products of these steel mills are rails, beams, and half-products (ingots, billets, sheet bars, etc.). The half-products are the raw material of the rolling mills. The large steel works found that the straight rolling mills were not keeping pace with their development, and that it was safer, as well as more profitable, to work up their own crude steel to a large extent. They were generally mixed works, controlling their own supplies of fuel, ore, and pig iron. These works formed the Half-products Syndicate (*Halbzeugverband*), and this cartell, combined with the rail and beam pools, was the immediate forerunner of the present Steel Syndicate. At first, however, they had a price agreement simply, and it was somewhat later (1899) that the sale of half-products was syndicated.[2] This cartell soon included all the great steel works of western Germany. The works supplied the straight rolling mills with their raw material, and at the same time competed with them in the manufacture and sale of rolled products. This put the rolling mills in a dangerous position, because, technically, they were no match for the great steel works. In 1897 a comprehensive but complicated cartell was established between the pig iron producers of the Ruhr, the Minette, and Siegerland.[1] In the period between 1895 and 1904 the principal cartells established for rolled products were as follows: heavy sheets[2] and rods[3] in 1897, wire nails in 1898,[4] and light sheets in 1902.[5] The rolling mills failed, however, to cartell steel bars. In Silesia rolled products were effectively cartelled ever since 1887, in one form or another.[6] These cartells do not comprise, by any means, all of those found in the steel industry during this period, but were the most important connected with the development of organization in the steel trade.[7]

---

[1] Heymann, p. 153; Kollmann, pp. 7, 8.

[2] *Cf.* Voelcker, *Bericht ueber das Kartellwesen in der inländischen Eisenindustrie,* Berlin, 1903, p. 52. *Cf.* A. Kirdorf, *Enquete,* VI., p. 410; Kollmann, p. 7.

The development of cartells in various steel products called forth protective organizations among the consumers. An important organization of this sort was the Rhenish-Westphalian Purchase Association for pig iron, which was established in 1901.[8] More important than this was the Association for the Protection of the Interests of the Consumers of Half-products which was formed in 1902. This included forty-two concerns, mostly straight rolling mills, with a demand (in 1903) for 560,000 tons.[9] There were numerous other purchasing combinations, especially during the recent crisis.

The reasons for the formation of the Steel Syndicate, according to an official statement made to the government, were substantially as follows: The discovery of the Thomas or basic process had made practicable the utilization of the immense deposits of phosphoric ore in the

---

[1] Heymann, p. 153; Voelcker, *Bericht*, pp. 30–37.

[2] Kestner, pp. 55, 56.

[3] *Enquete*, VIII., pp. 696, 697.

[4] *Ibid.*, p. 711.

[5] *Statistik d. Oberschles. Berg- u. Hüttenwerke*, 1902, p. 80.

[6] *Enquete, S.V.*, Anlage 2.

[7] *Cf.* Voelcker, *Bericht*, p. 73 *et seq.*; *Enquete*, VI., pp. 375, 376; *Deutsche Industrie-Zeitung*, 1903, p. 141.

[8] *Enquete*, V., pp. 353, 354.

[9] *Ibid.*, VI., p. 401.

Minette district, and had given rise to a number of large steel works adapted to that purpose. This, in turn, had induced the existing steel works to modernize and enlarge their plants, which caused an overproduction of steel, and imposed upon the steel works the necessity of combining to restrict their output. The earlier efforts in the way of price agreements proved ineffectual, and made necessary the establishment of stronger combinations. Strong cartells thus established in various steel products proved defective also, because they lacked control over the export trade, as well as a comprehensive oversight of the market. The Steel Syndicate was formed, therefore, with the intention of bringing about a harmonious action in all lines of steel production. The first step was to secure an effective combination of the heavy rolled products (half-products, rails, and structural steel), and these products could be more easily brought into a combination because they were made to a great extent by a limited number of large mixed works, which had a certain economic likeness. The next step was to bring about a cartell for the light rolled products. This, however, had not gone beyond a determination of quotas, and awaited an agreement with the outside straight rolling mills and the Siemens-Martin (open hearth) steel mills before it could be firmly established.[1]

The project for the Steel Syndicate was first broached in a practical sense in the autumn of 1902. The chief spirit in the movement was Adolf Kirdorf, the head of the Half-products Syndicate. After preliminary preparations a meeting was held in February, 1903, which chose a commission to work up a plan. This plan came up for acceptance in the autumn of the same year. There were the usual protracted negotiations, but finally all of those works whose adhesion was regarded as vital were secured by various compromises and concessions, except Krupp, Phoenix, and Westfaelische Stahlwerke. The agreement was ratified nevertheless on March 1, 1904, and almost immediately after Krupp joined in consideration of an enlarged quota. It was deemed essential, however, that Phoenix should enter the combination, and the newly formed Syndicate applied all its commercial and financial influence, especially with the Coal Syndicate and the banks, to achieve its purpose, treating it as a "scab" concern. The management of Phoenix refused to join because they regarded the quota allotted to them as insufficient. The Syndicate soon succeeded, chiefly through the influence of the great banks, in getting the shareholders of Phoenix to reverse the policy of the management. The vigorous and drastic measures which the Syndicate took to accomplish its purpose excited a good deal of unfavorable criticism, but Phoenix has accepted the situation with a tolerably good grace.[1] As a matter of fact, its profits have shown a large increase.[2]

---

[1] *Enquete, S.V.*, Anlage 5.

The Stahlwerksverband went into effect on March 1, 1904. It was concluded for a term ending on June 30, 1907; and, in case there is no written objection to its continuance by any member before December 31, 1906, it is to stand until June 30, 1912. The character of this agreement, in respect to matters of general interest, is substantially as follows:[3]—

The steel-works owners in the combination have an agreement whereby they obligate themselves to sell certain products to their central company, which is called the Stahlwerksverband. They agree further to meet in a general assembly to perform certain duties imposed by the agreement on that body, and also to submit to the directions of certain organs provided for in the agreement. The Stahlwerksverband, or central company, has, on its part, an agreement with the steel-works owners to purchase all of their products, of the kinds specified, and to sell them again under the terms fixed by the agreement. The Assembly of the Steel-works Owners elects an Advisory Council (*Beirat*), a body called the Commission, and several subordinate commissions. The Stahlwerksverband has the usual statutory organs of a company; namely, Supervisory Council, Managing Directors (*Vorstand*), and General Assembly. In the Assembly of Steel-works Owners each member has one vote for every 10,000 tons quota of production. Some of the chief powers of this body are: (1) election of Beirat and Commission, (2) admission of new members, (3) determination of eventual restriction of quotas, (4) assent to sales or leases of plants by owners, (5) determination of penalties, (6) dissolution of agreement in case of reappearance of competition, and (7) provision for the inclusion of light rolled products (B-Products) in syndicate sales. The Beirat is composed of members elected by the Steel-works Owners, each owner or group of owners having the right to elect one member for every 500,000 tons of quotas. The members of the Beirat must be chosen from the General Assembly. The chief powers of the Beirat are (1) holding members of the combination to their agreement, (2) provision of rules regarding selling prices and terms of sale, (3) determination of increase of quotas for B-Products (see below), (4) determination of prices to be paid the Steel-works Owners, (5) disposition of reserves, (6) imposition of penalties, and (7) authorization to Vorstand to conclude agreements with competitors, etc. The third organ of the cartell is the Commission, which is composed of eight members, and which has the following powers: (1) classification of commodities, and (2) determination of "scale prices," comparative weights and compensation for unusual specifications. Among the subordinate commissions the freight commission may be specially mentioned.

---

[1] *Cf.* Geschaelts-Bericht Phoenix, 1903–04.

[2] Liefmann, "*Zur heutigen Lage der deutschen Grosseisenindustrie*," *Conrad's Jahrbuecher*, November, 1905.

[3] This statement is based on the text of the agreement and a condensed exposition thereof submitted to the government by the Steel Syndicate. Cf. *Enquete, S.V.*, Anlage 5.

The selling company is called the "Stahlwerksverband, Aktiengesellschaft." It is located in Düsseldorf. The purpose of the company, as described in the by-laws, includes not only the purchase and sale of iron and steel products of all kinds, but also the acquisition and operation of all kinds of enterprises which are connected with the storage and transportation of iron and steel products. This company has a share capital of 400,000 marks in registered shares, which are not transferable without the consent of the General Assembly. This capital is nominal in amount, because the company, although it does an enormous business,[1] is, in effect, only an agent of the Steel-works Owners, and sells for cash. The Managing Directors, or the *Vorstand*, conduct the business of the company, which has a very large and highly organized bureau. There is one department for accounting, statistics, taxation, freights, legal work, and for dealing with the public authorities, and a department for the sale of each of the three kinds of heavy rolled products.

The commodities covered by the agreement are specifically described. They include (1) the production of crude steel and forge iron; (2) the purchases of the same, and also of rolled half-products and products enumerated under the two following specifications; (3) the production of half-products, railway material, and structural steel; (4) the production of bars, rods, heavy and light sheets, tubes, railway axles, wheels and tires, forge pieces, cast steel pieces, etc., so far as not made from material under 3 and 4, but directly from crude steel; and (5) the purchase from Steel-works Owners of commodities enumerated under 3, if they are for the plants of the Steel-works Owners, and if the products thereof are sold by the cartell. The products enumerated under 1 and 3 are called A-Products, and those under 4 are called B-Products. The Stahlwerksverband buys from the Steel-works Owners all the products which are offered for sale under the group A-Products, and sells the same for the general account. For B-Products, on the other hand, the amount of production is fixed, but the sale is left to the Steel-works Owners individually, or to such other cartells as they may belong to.

---

[1] The sales in the first year, which did not comprise the whole output, were about $62,000,000. Cf. *Iron and Coal Trades Review*, September 15, 1905.

The quotas of the Steel-works Owners for the A-Products sold by the Stahlwerksverband are based on the amount of crude steel originally allotted to each by the agreement. This is called the principal quota, and is divided into three "group quotas"; namely, (1) crude steel and half-products for direct sale, (2) railway material, and (3) structural steel. The group quotas are given in crude steel equivalents. It is the duty of the selling company to distribute the orders so that each concern shall have its share according to its quotas. There are various particular provisions in this connection. If the total of the quotas is increased, they must all be increased in proportion; but, if any concern is unable to maintain the increased output allotted to it, the works which produce the excess are required to pay those which produce less a contribution of 5 marks per ton. Certain exchanges in quotas between different plants are allowed, with the consent of the Vorstand, and it is also provided that the Vorstand can make arrangements whereby certain works shall receive the bulk of orders for unusual specifications. Both these provisions aim at a greater economy of production by a division of labor. Each Steel-works Owner must fulfil orders allotted him; but, in case they involve changes in his equipment, compensation must be made. Where a concern uses its own products, the Stahlwerksverband does not intervene as a buyer or seller.

The selling prices are fixed by the Vorstand under the guidance of rules laid down by the Beirat. The Steel-works Owners receive a minimum price ("table price") originally, and afterward what excess remains from the actual proceeds after deduction of the various expenses of administration, reserve, rebates, etc., incurred by the selling company. It is evident that the only way open for any particular concern to increase its profits is to reduce its costs of production. The "table prices" are for Thomas or basic Bessemer steel. Extra prices are allowed for commodities of superior grade, based on the extra proceeds of sale. A particular concern may receive higher prices than others if it is clear that its product commands a higher price in the market on account of quality. Important features of the price regulation are the freight-basing points. In the domestic trade the rules are as follows: for half-products there are five bases, and the purchaser is quoted a price from the base nearest to his works; for railway material the base is the producing concern; for structural steel the base is Diedenhofen. In the foreign trade the basing point is the plant most favorably located for the purchaser. These rules represent partly compromises between different interests in the combination and partly attempts to economize freight charges. For the foreign trade, for example, each concern has the advantage or disadvantage resulting from its geographical situation with regard to the destination. In domestic railway material, on the other hand, geographical situation has no effect. Export bounties which are received from other cartells (*e.g.*, Coal Syndicate or Pig Iron Syndicate) are distributed in such a manner that the Steel-works Owners who make the commodities for which export bounties are received get their share thereof, whether their products are exported or not.

For the B-Products the principal quota is the weight of crude steel required to make them. This is fixed for each concern in the original agreement. A concern can reduce its sale of B-Products at will. On the other hand, it cannot increase its sales without leave from the Beirat. If a concern sells more than its allotted quota, it must pay 20 marks per ton for such excess sales.

The agreement provides for a "reserve," which is intended principally for the promotion of the export trade or for fighting competitors. It is acquired by deductions made from the proceeds of sale on the basis of the "table prices." This assessment is fixed by the Assembly of Steel-works Owners, with the limitation that it cannot exceed 3 per cent. of the sums paid under the "table price" payments. The Steel-works Owners are prohibited from selling or leasing their plants without the consent of the Assembly of Steel-works Owners, but this assent must be given if proper guarantees are provided for the fulfilment of cartell obligations. On the other hand, the Steel-works Owners are forbidden to buy or operate any outside plant that makes A- or B-Products or to erect new plants for the production of those commodities. The Vorstand has the right to supervise all concerns, and to inspect plants, books, and papers, in order to insure due performance of obligations. Detailed provisions are made regarding fines and penalties. An arbitration court is established also, which (to the exclusion of the courts of law) has jurisdiction over disputes concerning the obligations of the parties to the agreement. In case new competition appears during the term of the cartell with a production amounting to 5 per cent. of the cartell in A- or B-Products, according to the opinion of the Beirat, the agreement may be cancelled.

The original quotas of the members of the Stahlwerksverband for different products are shown in the following table:—

QUOTAS IN THE STAHLWERKSVERBAND (IN THOUSANDS OF TONS).

(*Jahrbuch für den Oberbergamtsbezirk Dortmund*, 1901–04.)

COMPANY.	A-Products.	A-PRODUCTS.			B-Products.	B-PRODUCTS.					Total A- and B-Products.
		Half-products.	Railroad Material	Structural Steel		Bars, etc.	Rods.	Plates and Sheets	Tubes	R.R. Axles, etc.	
1. Deutscher Kaiser, Thyssen & Co.	285	50	133	102	419	253	29	93	43	3[4]	704
2. Königs u. Laurahütte	140	in B	85	55	335	244	—	80	31	10	475
3. Oberschlesische Friedenshutte											
4. De Wendel & Co.	248	65	53	131	212	129	24	58	—	[5]	460
5. Fried. Krupp	234	90	144	—	222	50	7	40	3	122	456
6. Hörder Verein	250	122	63	65	175	55	—	103	—	17	425
7. Gutehoffnungshütte	202	49	110	43	206	74	34	76	—	22	408
8. Rombacher Hüttenwerke	341	217	48	76	38	38	—	—	—	[6]	379
9. Rheinische Stahlwerke	251	111	100	40	134	66	—	54	—	13	378
10. Aachener Hütten Akt.V.	214	77	49	88	119	101	17	—	—	1	333
11. Dortmunder Union	229	59	114	56	104	90	—	—	—	14	323
12. Eisen u. Stahlwerk Hoesch	152	38	63	51	169	102	20	41	—	6	321
13. Bochumer Verein	143	55	87	1[3]	91	15	—	—	—	76	306
14. Ges. f. Stahlindustrie	73	18	52	2							
15. Burbacher Hütte	194	10	55	129	99	84	15	—	—	—	293
16. Rochlingsche Werke, Volklingen,	192	37	50	105	101	75	26	—	—	—	293
17. Gebr. Stumm	172	25	62	85	121	95	26	—	—	[7]	293
18. Peiner Walzwerk	165	15	5	145	88	76	—	—	—	—	253
19. Lothringer Hüttenverein, Aumetz-Friede	210	128	27	55	30	30	—	—	—	—	240
20. A.G. Differdingen	149	71	23	55	70	30	40	—	—	—	219
21. Eisenhütten Verein, Dudelingen	191	111	40	40	20	20	—	—	—	—	211
22. Dillinger Hüttenwerke	91	61	30	—	97	—	—	88	—	9	188
23. Maximilianshütte	109	17	54	38	55	33	—	12	—	—	164
24. Hasper Eisen u. Stahlwerk	25	7	—	17	76	41	35	—	—	—	101
25. Eisenwerk Kraemer	40	—	27	14	60	60	23	—	—	[8]	94
26. Georgs-Marien-Verein	62	[1]	61	—	14	2	—	—	—	12	75
27. Van der Zypen	23	6	1[2]	16	47	28	—	—	—	19	70
28. Phönix	166	50	116	—	350	120	140	70	—	21	416
29. Kattowitzer A.G.	25	—	5	20	50[9]	50[9]	—	—	—	—	75
30. Sächsische Gussstahlfabrik	24	—	24	—	24	19	—	—	—	5	48
31. Huldschinsky'sche Hüttenwerke	15	—	5	10	—	—	—	—	—	—	15
Total	4,614	1,490	1,685	1,438	3,522	1,976	435	715	47	349	8,012

The figures in this table are given in thousands of metric tons to the nearest thousand, but for small quotas this does not indicate them with sufficient accuracy. For the small quotas thus affected the precise figures for the corresponding numbered references are [1] 300. [2] 1,200. [3] 1,100. [4] 2,500. [5] 400. [6] 200. [7] 161. [8] 400.

The addition of the column for tubes does not check, which is presumably due to a typographical error in the authority quoted.

[9] That is, up to 50.

In addition to the quotas given above, certain concerns have the privilege of purchasing a fixed amount of steel. The only important allowance is that of Phoenix, which amounts to 100,000 tons. Besides this certain other works are to receive in the future certain additions to their quotas. Here, again, there is only one case in which a considerable increase is provided for; namely, Krupp, which by April, 1907, will be allowed 706,000 tons for its total quota.[1] Taking the total quotas, the geographical distribution is as follows: for the Rhenish-Westphalian works, 54 per cent.; for the works in the Saar, Lorraine, and Luxemburg, 32 per cent.; for Upper Silesia, 7 per cent.; and the remainder (7 per cent.) in various parts of Germany.[2]

The proportion of the production of the Stahlwerksverband to the total production of Germany is estimated at about 90 per cent.[3] All the important steel works which were deemed to come within the scheme of organization except one—the Westfälische Stahlwerke—are included in the agreement. Several works have been added since then. There does not seem to be any immediate likelihood of new competition appearing. To start a new first-class steel works with an independent supply of coal and coke would cost, it is said, fifty million marks.[4] Voelcker says, "The German Stahlwerksverband represents for the cartells in the iron industry, not the keystone of the arch, but rather the foundation of a new grouping." [5] The chief purposes of the cartell are officially stated to be (1) the maintenance of the domestic market, (2) the full occupation of the works, (3) the simplification of working programmes of the works, and (4) the elimination of competition among German works in foreign markets.[1] Adolf Kirdorf was elected as the first head of the Syndicate.[2]

---

[1] *Jahrb. f. d. O. Dortmund*, 1901,–04, pp. 720, 721.

[2] *Ibid.*, p. 722.

[3] Voelcker, "*L'État actuel de l'industrie sidérugique allemande et sa organisation*," *Revue économique internationale*, Décembre, 1904, p. 742.

[4] *Enquete, S.V.*, p. 16.

[5] Voelcker, *Revue écon.*, Décembre, 1904, p. 744.

It is difficult to estimate the capital value of the concerns in the Steel Syndicate. They include, of course, besides steel mills, coal mines, coke works, blast furnaces, etc. If the share capital at the market quotation is taken, and to this is added the outstanding funded debt, a fairly representative figure is obtained. On this basis, using figures chiefly for 1904, the following computation has been made from date in the *Dortmunder Jahrbuch* and *Saling's Boersenpapiere*. For twenty concerns in the Syndicate, embracing 63 per cent. of the total quotas for A- and B-Products, the total capital value is computed to be about 958.27 million marks. If the same proportion be applied to the aggregate quotas of the syndicated concerns, the total capital value would amount to 1,521 million marks, or about $362,000,000.[3]

The Steel Syndicate aimed at a national organization of the industry, and several concerns in Upper Silesia were included in the combination. The steel producers of that region, however, went further, and established a local organization, which in some respects was more complete than the Steel Syndicate. The distance of Upper Silesia from accessible markets makes it necessary for the steel works to manufacture the finer products which pay better for distant shipment. The German Rolling Mill Cartell, which was dissolved in the early nineties, left behind it in Silesia a local cartell which included all but one concern, and this organization lasted down to the end of 1904. It was, however, inadequate, and hence some of the Silesian works joined the Steel Syndicate. This led to the organization of a local steel combination[1] on December 16, 1904, which went into effect at the beginning of 1905. This was called the Oberschlesische Stahlwerksverband G. m. b. H.[2] It includes the eight steel works of Upper Silesia, one in Berlin, and one in Danzig. The term of the agreement is fixed from January 1, 1905, to June 30, 1907, although an earlier dissolution was possible under certain contingencies. The agreement in its general form is modelled on that of the greater Steel Syndicate, but it differs in one very important particular. As there is little of crude steel or heavy rolled products made for sale, these are not syndicated, but the light rolled products are cartelled instead. Some of these light rolled products are sold by the syndicate, but the others are simply regulated as to output.[3] There were some difficulties in the beginning which threatened to break it up, but these were settled,[4] and soon after the five remaining steel works in Upper Silesia became members of the larger or "German" Steel Syndicate.[5]

---

[1] *Enquete, S.V*, p. 37. [2] *Stahl u. Eisen*. 1904, p. 331.

[3] Jutzi, taking the par value of the capital stock, the reserves, and the bonded debts, estimates the total capital *invested* at 1031.5 to 1041.5 million marks. *Die deutsche Montanindustrie auf dem Wege zum Trust*, Jena, 1905, p. 31.

One of the characteristic developments of industrial combinations has been the suppression of the middlemen. The Steel Syndicate furnishes some striking illustrations of this fact. Before the formation of the syndicate the dealers in structural steel had been organized in five groups by the Beam Syndicate and,[6] these groups were recognized by the Steel Syndicate after it was established. The members of these groups of dealers agree to sell according to certain minimum prices and conditions, and each group has a distinct territory. Similar organizations have been formed in Switzerland, Denmark, Sweden, and Norway.[1] The Steel Syndicate declares that its special purpose in promoting and recognizing them has been to obtain a better view of the market, and to exercise a greater control over it.[2] The dealers have submitted to the inevitable with what grace they could, but they complain that the profit (a commission practically) is too small.[3] For the other products, which the syndicate sells directly,—namely, half-products and railway material,—the conditions of trade are different; *i.e.*, they are both sold direct to the consumers in the domestic market, and also to some extent abroad. In the most important foreign market of the syndicate,—namely, London—the former agents of the various companies have been organized into a limited liability company over which the syndicate has taken pains to secure complete control, both of *personnel* and stockholders.[4] Similar agencies have been established to represent the syndicate in Amsterdam and at Brussels. Further, in order to get a better view of the English market, the syndicate has stopped selling f. o. b.[5] Continental ports, and sells instead c. i. f. English ports.[6] The syndicate has even introduced sales with delivery at works to the English consumer.[7]

---

[1] Cf. *Enquete, S.V.*, Anlage 4.

[2] G. m. b. H. is the abbreviation for "company with limited liability."

[3] *Enquete, S.V.*, Anlage 2; *Deutsche Industrie-Zeitung*, December 30, 1904, p. 475.

[4] Cf. *Kartell-Rundschau*, 1905, pp. 270, 374, 428.

[5] *Ibid.*, p. 490.

[6] *Deutsche Industrie-Zeitung*, January 22, 1904, p. 34.

It would be difficult to appreciate properly the policy of the Steel Syndicate, especially on account of the brief term of its existence, without some reference to the previous movement of production and prices. Before speaking, however, of any particular feature, it is desirable to note a few of the leading facts regarding the steel market in recent years. The period since 1895 may be approximately described as follows: From 1895 to 1900 there was a great boom, which culminated in a short period of high prices in 1899–1900, and terminated in a crisis in the latter year, which brought on a general and very serious collapse. A period of depression followed, which may be said to cover the years 1901 to 1902.[1] During 1903 improvement was evident, and since then the steel trade has been active, if not, generally speaking, remarkably profitable. The last half of 1905 has brought an extraordinary revival of activity.

---

[1] *Enquete, S.V.*, Anlage 5, p. 44; *Deutsche Industrie-Zeitung*, June 17, 1904, pp. 226, 227.

[2] *Enquete, S.V.*, Anlage 5, p. 44.

[3] *Ibid.*, p. 22.

[4] *Deutsche Industrie-Zeitung*, May 27, 1904, p. 198; *Kartell-Rundschau*, 1904, p. 532.

[5] "Free on board" at port of shipment.

[6] "Cost, insurance, and freight"; *i.e.*, price delivered at port of destination.

[7] *Enquete. S.V.*, Anlage 5, p. 43.

The raw material cartells had established themselves at the beginning of the period, and occupied a favorable position throughout. The cartells which existed in finished products were generally more loosely formed, and their policy both in production and prices was less conservative. When the depression came, they were in a weak position, and were more eager to form combinations. The raw material cartells had, however, the advantage, and succeeded in shifting the greater part of the losses occasioned by the hard times on to the manufacturing branches. The former were able, that is, to maintain their prices to a large extent, while the latter had to reduce theirs, and to accept greatly diminished margins. The general policy of all producers was to keep up their production, and to sell abroad at any cost what they could not find a market for at home. The following table shows the movement of production in some leading lines:—

---

[1] *Cf.* Walker, pp. 59–77.

PRODUCTION OF PIG IRON AND CERTAIN IRON MANUFACTURES IN THE GERMAN CUSTOMS UNION, 1895-1904.

[IN THOUSANDS OF TONS: THUS 5,465 = 5,465,000 TONS.]

Year.	(1) Pig Iron.	(2) Cast-iron Wares, Second Casting.[1]	(3) Half-products (from Converter or Siemens-Martin) for Sale.	(4) Rails.	(5) Finished Products (from Converter or Siemens-Martin).	(6) Wire Rods (from Converter or Siemens-Martin.)	(7) Tin Plate.
1895	5,465	1,146	1,132	495	2,830	502	31
1896	6,373	1,355	1,358	583	3,462	549	34
1897	6,881	1,440	1,273	799	3,863	513	31
1898	7,313	1,573	1,428	819	4,353	476	35
1899	8,143	1,758[2]	1,508	808	4,820	512	34
1900	8,521	1,785	1,536	922	4,757	457	31
1901	7,880	1,503	1,648	849	4,486	523	36
1902	8,530	1,506	2,230	945	5,101	574	42
1903	10,018	1,704	2,412	1,080	5,802[4]	—	45
1904	10,058	1,987	2,374[3]	—	5,976	—	48

Columns (1), (2), (5), *Jahrb. f. d. O. Dortmund* 1901-04, p. 728. Columns (3), (4), *Enquete, S.V.*, Anlage 7. Column (6), *Enquete*, VIII., p. 717. Column (7), *Enquete*, IX. p. 161.

---

[1] Excluding trifling production in Luxemburg, except in 1904.

[2] Obvious error in original corrected.

[3] *Jahrb. f. d. O. Dortmund*, 1901-04, p. 728.

[4] Excluding 135,699 tons in Luxemburg.

An inspection of this table shows a great increase between 1895 and 1900 for all the products given, except rods and tin plate. The decrease in production in 1901 is equally general, with a slight recovery in 1902. With 1903 production quite generally forged ahead of previous figures, and has continued to increase since. The steadiness with which production has increased in Germany is remarkable. Voelcker states that the normal increase in the demand for steel in Germany is about 420,000 tons per annum.[1] The pig iron production in Germany during the nine years ending 1904 increased at an average rate of 510,000 tons per annum. The production of pig iron in 1904 showed practically no increase over 1903, while half-products declined slightly.

The production policy of the Steel Syndicate during the period of two years since its establishment has not been characterized by any extraordinary features. The syndicate has published the statistics of production only for A-Products. The shipments of these products (reckoned in crude steel weight) were as follows:—

March 1, 1904, to February 28, 1905 (12 mos.)	4,533,805 tons, A-Products
March 1, 1905, to December 31, 1905 (10 mos.)	4,517,512 " "

The production of the first business year was about 1.4 per cent. less than the quotas prevailing for that period. The production for the first *eight* months of the second business year, however, was about 9.9 per cent. greater than the prevailing quotas for that period.[2] For the chief subdivisions of A-Products the shipments, reckoned in crude steel weights, were as follows:[3]—

---

[1] Voelcker, *Revue écon.*, Décembre, 1904, p. 732.

[5] Cf. *Enquete, S.V.*, Anlage 5; *Glückauf*, 1906, p. 82; *Stahl u. Eisen*, 1905, p. 1385.

[3] Cf. *Enquete, S.V.*, Anlage 5; *Glückauf*, 1906, p. 82.

Period.	*Half-products.*	*Railway Material.*	*Structural Steel.*
March 1, 1904, to February 28, 1905 (12 mos.) .	1,599,598 tons	1,394,623 tons	1,529,435 tons
March 1, 1905, to December 31, 1905 (10 mos.) .	1,661,649 "	1,399,960 "	1,455,903 "

Comparing the same periods, the shipments during the first ten months in the second year exceeded the shipments during the first ten months of the first year as follows: for all A-Products by 18 per cent., for half-products by 23 per cent., for railway material by 20.4 per cent., and for structural steel by 11 per cent. The production policy of the syndicate as indicated by these figures shows a decided tendency towards expansion. It is instructive to compare the policy of the Steel Syndicate with the Half-products Syndicate which preceded it. The following figures for half-products are in *finished weights:*[1]—

Period.	*Sales of Half-products, Finished Weights.*
March 1, 1902, to February 28, 1903	1,460,637
March 1, 1903, to February 28, 1904	1,449,698
March 1, 1904, to February 28, 1905	1,411,903

The sales in 1904–05, under the régime of the Steel Syndicate, were less than those of the Half-products Syndicate. This reduction came out of the export trade, and not out of the domestic supply, as is shown by the following table of domestic sales:[2]—

Period.	*Domestic Sale, Half-products, Finished Weights.*
1902–03	737,621 tons
1903–04	844,629 "
1904–05	1,018,277 "

The data regarding the movement of B-Products are very meagre. The syndicate does not generally give out these figures. Kollmann, however, gives a statement of the shipments of B-Products during the first year of operation, together with the quotas, as follows:[1]—

---

[1] *Enquete, S.V.*, Anlage 5.

[2] *Ibid.*

B-Products.	*Shipments.*	*Quotas.*
Bars	1,718,211 tons	1,847,622 tons
Rods	371,713 "	434,230 "
Sheets	682,889 "	714,927 "
Axles	306,599 "	351,546 "
Tubes	48,226 "	53,400 "

At the end of March, 1905, the syndicate voted to increase the quotas for bars and sheets by 5 per cent. This increase became permanent on July 1, 1905.[2] The total allotment for A-Products on July 1, 1905, was 4,864,485 tons, as compared with 4,614,225 tons shortly after the formation of the combination. The addition of five more concerns in Upper Silesia increased the total to 4,900,000 tons.[3] In January, 1906, the quotas for bars and sheets were increased again by 5 per cent., while the quotas for rods were increased 10 per cent. The total increase of quotas over the original quotas are as follows: bars and rods, 10 per cent.; sheets, 15 per cent.[4]

The movement of prices in the steel trade has been affected in an important degree by the existence of cartells for the various products, but their influence on prices has been very unequal, and none of them ever had complete mastery of the situation. The following table shows the general course of development for the chief raw materials and the chief manufactured products during recent years:—

---

[1] Kollmann, p. 12.

[2] *Ibid.*, p. 31; cf. *Kartell-Rundschau,* 1905, pp. 193, 194, 367–372.

[3] *Iron and Coal Trades Review*, December 15, 1905, p. 2022.

[4] *Deutsche Industrie-Zeitung*, January 26, 1906, p. 45.

PRICES OF IRON, IRON PRODUCTS, AND RAW MATERIALS.

(In Marks.)

Year.	(1) Minette Iron Ore.	(2) Blast Furnace Coke.	(3) "Fett" Coal Mine-run.	(4) Thomas Pig Iron (Westphalia).	(5) Mill Iron (Silesia).	(6) Thomas Ingots Crude.		(7) Thomas Billets.	(8) Rails.
	Aver. per ton.	Aver. per ton.	Aver. per ton.	Aver. per ton.	Aver. per ton.	Jan. per ton.	July per ton.	Jan. per ton.	Aver. per ton.
1895 . .	3.30	11.00	8.00	45.63	—	—	—	—	—
1896 . .	3.30	12.02	8.25	56.58	57.5	72	75	81	—
1897 . .	3.40	13.87	8.85	56.50	61.7	81	84	90	103–5
1898 . .	3.55	14.00	9.08	60.00	61.6	83	83	93	108
1899 . .	3.55	14.37	9.37	70.25	75.7	87	105	97	108–127
1900 . .	3.90	21.29	10.25	{ 91.20 to 71.80 }	90.7	117	125	127	130–140
1901 . .	4.40	22.00	10.25	90.20	66.5	97	78	107	100–120
1902 . .	2.85	15.00	9.60	57.13	60.8	75	82.50	90	100–105
1903 . .	—	15.00	9.38	57.21	—	77.50	77.50	90	105–130
1904 . .	—	15.00	9.38	57.80	—	77.50	77.50	90	—

Year.	(9) Beams.		(10) Bars.		(11) Rods.		(12) Boiler Plate.	(13) Light Sheets.	(14) Tin Plate.
	Jan. per ton.	July per ton.	Jan. per ton.	July per ton.	Jan. per ton.	July per ton.	Aver. per ton.	Aver. per ton.	Aver. per ton.
1895 . .	—	—	95	95	93	93	152.50	{ 121.67 to 128.69 }	292.3
1896 . .	90	98	105	120	107	112.50	171.66	{ 142.08 to 146.25 }	301.2
1897 . .	103	105	130	130	122.50	112.50	179.79	{ 127.08 to 133.75 }	292.9
1898 . .	108	108	117.50	120	123	123	186.25	127.10	289.2
1899 . .	108	120	132.50	172.50	125	150	195.00	184.00	329.4
1900 . .	130	140	185	190	185	185	210.42	197.50	398.0
1901 . .	120	112.50	120	105	150	135	180.00	160.00	340.6
1902 . .	100	105	105	112.50	125	130	158.33	140.17	358.0
1903 . .	105	105	105	110	120	120	150.00	135.88	331.3
1904 . .	105	105	—	—	112.50	—	151.00	125.00	—

Column (1), Bosselmann, pp. 37, 38, 42. Columns (2), (3), (4), (12), (13), *Jahrbuch f. d. O. Dortmund*, 1901–04, pp. 696, 733 (iron prices in 1901 nominal). Column (5), Kuh, p. 222. Columns (6), (7), (8), (9), *Enquete, S.V.*, Anlage 7 (rails, domestic prices at Düsseldorf). Column (10), Voelcker, *Bericht*, pp. 130, 131. Column (11), *Enquete*, VIII., pp. 742–747. Column (14), *Enquete*, IX., p. 182.

This table does not present, of course, the details of price movements, and, in general, it does not show the extremes. For example, pig iron was quoted as low as 45 m. in 1901.[1] In Silesia sheets were from 205 to 215 m. at the beginning of 1900, and from 125 to 135 m. at the end of the year.[2] To a very considerable extent, also, rebates were granted on the prices quoted, and even on the material previously sold. Most of the coke was sold for 1900 and 1901 on two-year contracts at 17 m.; and, though the market quotations ran higher, very little was bought on that basis.

An inspection of the price table shows that there was a general advance in prices from 1895 to 1900. The crisis developed in the middle of the latter year. The advances appear quite as early for the manufactured products as for the raw materials, and, on the whole, it may be safely asserted that they were the result of general economic influences, and that there was no causal relation between them. Dr. Voelcker, in his impartial and judicious summary of the situation, declares that from 1895 to 1898 the cartells followed a moderate price policy, but that from 1899 to 1901 the reverse in general was true.[3] The uncartelled lines got high prices in 1899 and 1900, owing to the favorable market, and the cartelled lines were unable to resist the temptation to put up their prices to an immoderate height also. The fall in prices, after the depression set in, was relatively greater for the manufactured products than for raw materials or half-products, and it came sooner. This was partly due to the fact that the raw material cartells took advantage of their strong position to make their customers take their supplies on long-term contracts; but the latter were also to blame, as they were over-anxious to get supplies, not suspecting that a crisis was imminent.[1] The two chief offenders were the Coke Syndicate and the Pig Iron Syndicate.[2] The Steel Syndicate, at the beginning of its operations, established a scale of domestic prices for certain standard products of basic steel. The most important prices were as follows:[3]—

---

[1] Cf. *J.-B. d. Handelskammer Oppeln,* 1901, p. 30; Wieser, "Die *rheinisch-westfälische Eisenindustrie in der gegenwärtige Krisis,*" *Jahrb. f. Gesetz. Verwalt. u Volksw.,* Jahrg. 1902, p. 304.

[2] *J.-B. d. Handelskammer Oppeln,* 1900, p. 29.

[3] Voelcker, *Bericht,* p. 23. *Cf.* Vogelstein, *S. d. V. f. S.-P.,* p. 86. Dr. Voelcker at that time was in the government service, but since then he has become a director of the Steel Syndicate.

Crude ingots	77.50 m. per ton
Rolled ingots (blooms)	82.50
Billets	90.00
Sheet bars	92.50
Structural iron	105.00–108.00
Rails	112.00
Ties	105.00

These prices prevailed without essential modification until November, 1905. A comparison of these prices with those of the years immediately preceding (1902 and 1903) and the years before the boom acquired much headway (*e.g.*, 1896 and 1897) tends to show that the price policy of the Syndicate has been moderate. English reports announce, however, a general 5 shilling advance for half-products of the Steel Syndicate in November, 1905, and predict a further rise.[4] These prices look rather high. The price policy of the syndicate, as far as the domestic market is concerned, was enunciated by one of its directors, Dr. Voelcker, as follows: "We do not intend to allow our prices to change continually with the fluctuations of the market. We do not desire, namely, to raise our prices suddenly and rapidly, if the conditions are very favorable; we do not wish, on the other hand, to reduce our prices in bad times, with a declining demand; we desire to keep the middle course."[1]

---

[1] Voelcker, *Bericht*, p. 255.

[2] *Cf.* Calwer, *Handel u Wandel*, 1901, pp. 31, 32; Voelcker, *Bericht*, pp. 38–45.

[3] *Enquete*, *S.V.*, Anlagen 3, 5, u. 7. *Cf.* Kollmann, p. 26. Kollmann gives the price of rails at 118 m.

[4] *Iron and Coal Trades Review*, November 17, 1905, p. 1687.

The syndicate does not fix the prices of light rolled products. The price movement for some of the principal lines is shown in the following table:—

PRICES OF LIGHT ROLLED PRODUCTS.[2]

(*In Marks.*)

Date.	Bar Steel (Converter).	Hoops.	Boiler Plate (Converter).	Light Sheets (Converter).	Rods (Converter).
1904.					
January 1	107–110	12.250–127.50	150	115	112.50–117.50
April 1	112	125–130	155	115	112.50–117.50
July 1	112–115	122.50–127.50	150	115	120
October 1	110–112	122.50–127.50	150	115	112.50–117.50
1905.					
January 1	106–108	122.50–127.50	150–155	115	112.50–117.50
April 1	110–115	123	150–155	120–122.50	125
July 1	110	123–125	—	115–120	125
October 1	110–112	125–127.50	130	112–120	125
December 1	112–115	125–127.50	130–135	122.50–125	127.50
1906.					
January 1	115–118	130–132.50	130–135	126–130	132.50

A distinct upward movement is observable in the last half of 1905, to which boiler plate forms an exception. This corresponded to an increase in consumption, especially in the domestic market[3]. Comparing these prices with those of preceding years, the prices of bar steel were unduly low; and the same is true also for light sheets and for rods in 1904. In 1905 the prices of light sheets moved erratically, and were, on the whole, too low, while the prices of rods advanced to a reasonably good basis. The position of steel bars became tolerably good only at the beginning of the year 1906.

The burning question of the steel trade since the crisis has been the position of the straight rolling mills (*reine Walzwerke*) with reference to the mixed steel works (*gemischten Werke*). The latter are the great

[1] ***Enquete, S.V.***, p. 3.

[2] ***Stahl u. Eisen***, 1905, p. 1216.

[1] *Glückauf.*

works which generally have their own raw materials, and combine the manufacture of heavy and light steel products. Though for a time in the seventies and eighties this integration in industry fell into some disfavor,[1] it is accepted to-day in Germany, as elsewhere, as the necessary basis for large and successful operations. Of the 31 original members of the Steel Syndicate, 17 produce coal, 25 iron ore, and 27 pig iron.[2] These large steel works produce also the bulk of the light rolled products. For example, they produce about three-fourths of the bar steel of Germany.[3] Probably the straight rolling mills do not produce over one-seventh. The straight rolling mills are almost entirely dependent on the large steel works for their material, and they are at a disadvantage both in the manufacture and sale of light rolled products. The superiority of the steel works is based on (1) technical superiority, (2) economy in general expenses, and (3) economy in freights. Their technical superiority relates almost entirely to standard commodities, produced in great quantities, and is found chiefly in the economy of fuel and in the economy of construction and operation of plant. Considering these economies only so far as they relate to the rolling of the light products, the straight rolling mills concede that the large works have an advantage of from 4 to 6 marks per ton in rolling crude steel.[4] It is principally a question of saving heat by direct rolling. It is also obvious that the construction of a plant for a continuous and uninterrupted process is more economical. This factor, as well as that of saving in general expenses, which is equally obvious, is difficult to estimate. The saving in freight is estimated to average 1½ marks per ton.[5] Not all the large steel works enjoy these advantages, as they have not all been rationally located and constructed. The commercial advantage of the mixed work rests partly on their commercial and financial preponderance, and partly on their influence over prices and production.

---

[1] *Cf.* Bosselmann, p. 54; Stillich, *Eisen- und Stahlindustrie*, Berlin, 1904, pp. 40, 160, 162; Heymann, pp. 145–148; *Eisen-Enquete-Kommission*, 1878, p. 4.

[2] *Enquete, S.V.*, Anlage 4.

[3] *Kartell-Rundschau*, 1905, pp. 369, 490–492.

[4] *Enquete, S.V.*, Anlage 3.

[5] Cf. *Ibid.*, p. 12, Anlage 3.

The complaints of the straight rolling mills may be concisely formulated as follows: that the prices of half-products are too high in comparison with the prices of light rolled products; that the steel works, although they control the export, have been dumping half-products; that the export of prices are excessively low; and that the export bounties are insufficient to enable the straight rolling mills to compete with foreign mills using German half-products.[1] Regarding the price policy in the domestic markets, extensive comparisons might be made; but it is sufficient to cite that of Springmann, a leader of the straight rolling mill group, who divides the decade 1895 to 1905 into two five-year periods,—a period of prosperity and a period of depression. The margin between crude ingots and bar steel in the first period was 49.75 m., and in the second 29.54 m. He compares these with the margins between crude ingots and beams, which for the same periods were, respectively, 21.15 m. and 26.60 m., and he claims that the steadiness of the latter was due to the fact that the steel works combinations controlled the prices of beams. A representative of the steel works claimed, on the other hand, that the margins for beams were reasonable, as well as the margin for bars during the second period, but that the margins for bars had been too high in the first period.[2] On a previous occasion Springmann claimed that a margin of 37.50 m. was necessary between rolled ingots (blooms) and bar steel, while A. Kirdorf

---

[1] Cf. *Denkschrift zur Lage der Halbzeug kaufenden Walzwerke im letzten Vierteljahre* 1904: *Enquete, S.V.*, Anlage 3.

[2] *Enquete, S.V.*, p. 23.

(head of the Half-products Syndicate) asserted that 22.50 m. was sufficient.[1] The truth here probably lies near the mean. The rolling mills seem to make a better *prima facie* case in the margins for rods. They cite the cost of rolling rods as given by the Half-products Syndicate as 21 m. The price of billets was 90 m., which, together with 21 m. for rolling and 1.50 m. for freight, makes a total of 112.50 m. The prevailing price for rods, including domestic and export trade and deducting bounties, was 108.21 m. from January to March, 1904, and 107.71 m. from April to June, 1904. They were compelled, therefore, to sell at 4.29 m. and 4.79 m., respectively, below a fair cost of production.[2] The representatives of the straight rolling mills claimed that the steel works made exorbitant profits on half-products;[3] but A. Kirdorf denied it, and offered to prove it from the books of his company. He said that there were great differences in cost, and that the steel works that produced at a disadvantage had as good a claim to have prices adjusted to make their business profitable as the straight rolling mills.[4]

This conflict of interest has not appeared in Silesia, which is due partly to technical conditions and partly to the organization of the industry. A sliding scale has been established between rolled products and pig iron which automatically adjusts the margin.[5]

The Steel Syndicate is incomplete in two important points: (1) the open hearth mills are not in the combination, (2) the B-Products are not syndicated. The bar steel production from the open hearth furnaces is said to be 10 per cent. of the total.[6] The Steel Syndicate has made strenuous efforts to bring them in, but without success. It is said that they demand exorbitant quotas.[7]

---

[1] Cf. *Enquete*, VI., p. 410.

[2] *Ibid.*, *S.*,*V.*, Anlage 3.

[3] *Ibid.*, pp. 403, 511, 512.

[4] *Ibid.*, VI., pp. 396, 409, 418.

[5] *Cf.* Heymann, p. 313.

[6] *Tageblatt*, August 17, 1905.

[7] Cf. *Deutsche Industrie-Zeitung*, March 17, 1905; *Kartell-Rundschau*, 1905, p. 144.

It has also been active in trying to bring about some *modus vivendi* for the straight rolling mills, which can hardly be brought into the syndicate before the open hearth furnaces. Various schemes have been proposed. Under their present disadvantageous position they have a relatively depreciated value. If they were admitted into the syndicate with reasonable quotas, they would unquestionably be coveted by the large mills, but it is difficult to see how the syndicate works could be induced to give away valuable privileges without a consideration. The straight rolling mills have proposed a sliding scale, but the proposed margins are high.[1] Finally, the syndicate has made a counter-proposal that the straight rolling mills buy half-products at ruling prices, and sell the rolled products to the syndicate with a fair allowance for the cost of rolling.[2] The syndicate wished to get control of the sale. The syndicate has made some effort to help bring about a separate cartell in bar steel, but the game of cartell politics is complicated, and there were some reasons for going slowly; *e.g.*, securing first the adhesion of the other Silesian mills and the open hearth furnaces.[3] The straight rolling mills, according to admissions from their own side, have been quite immoderate in their demands.[4] Accusations have not been wanting, however, that the Syndicate is really aiming to destroy the straight rolling mills, and to get control of the finished products,[5] though this is emphatically denied.[6]

The complaints of the straight rolling mills regarding the export policy of the Steel Syndicate concerns a matter of much greater interest to German industry and the world at large. The imports of steel are of minor consequence, although in the boom period, especially in 1899 and 1900, there was a considerable importation of pig iron and half-products.[1] The exports are shown in the following table:—

---

[1] *Enquete, S.V.*, Anlage 8.

[2] *Kartell-Rundschau*, 1905, pp. 490–492.

[3] Cf. *Ibid.*, p. 427; *Enquete, S.V.*, p. 26.

[4] Cf. *Enquete, S.V.*, p. 26.

[5] *Deutsche Metall-Industrie-Zeitung*, January 7, 1905.

[6] *Enquete, S.V.*, p. 3 (Voelcker).

EXPORTS OF THE GERMAN CUSTOMS UNION.

[IN THOUSANDS OF TONS: THUS 272 = 272,000 TONS.]

Year.	*Pig Iron.*[2]	*Half-products.*[2]	*Finished Products.*[3]
1898	272	35	1,312
1899	235	23	1,244
1900	191	34	1,355
1901	304	202	1,815
1902	516	636	2,127
1903	418	638	2,281
1904	226	396	2,022

The domestic demand was so keen in 1899 and 1900 that the exports of pig iron declined. It is remarkable that finished products declined also. With the beginning of the depression in the domestic markets producers were led to increase their exports. This is especially marked for pig iron in 1901 and for half-products in 1902. The exports of finished products do not show such a decided increase. The straight rolling mills complained that the steel works were dumping their production in England, both during the régime of the Half-products Syndicate and since the Steel Syndicate was formed. In answer to this charge the Steel Syndicate submitted the following table for domestic and export sales of half-products (finished weights):[4]—

Year.	*Domestic.*	*Per Cent.*	*Export.*	*Per Cent.*
1902–03 .	737,121 tons	50.50	723,016 tons	47.97
1903–04 .	844,629 "	58.26	605,069 "	41.47
1904–05 .	1,018,277 "	72.12	393,626 "	27.88

The sales in 1904–05 were made during the régime of the Steel Syndicate. The question of dumping applies only to half-products, so far as other branches of the steel industry are affected, because the other A-Products—namely, rails and beams, etc.—are necessarily sold to the consumers in the countries where they are used. National interest, however, is almost equally opposed to dumping these products. The policy of the Steel Syndicate in the sale of all A-Products for the first year of its activity (1904–05) is shown in the following statement[1] (crude steel weights):—

---

[1] *Jahrb. f. d. O. Dortmund,* 1901–04, p. 734.

[2] Voelcker, *Bericht,* p. 29.

[3] *Jahrb. f. d. O. Dortmund,* 1901–04, p. 734.

[4] *Enquete, S.V.,* Anlage 5.

Commodity.	*Domestic.*	*Per Cent.*	*Export.*	*Per Cent.*
Half-products . .	1,154,910	72.20	444,688	27.80
Railway Material .	1,049,454	75.25	345,169	24.75
Structural Iron . .	1,174,147	76.77	355,288	33.23

The Steel Syndicate makes unquestionably a favorable showing. It also points out that, though the export of manufactures of half-products has declined somewhat, the decline has not been so great as the decline of half-products.[2] It is improbable that the straight rolling mills could have so increased their output as to have absorbed all the half-products exported, if they had been given the chance.[3] The straight rolling mills complain particularly of the exports to England. Although the Steel Syndicate could show from the official trade statistics there had been a heavy decline in this particular direction, it was well known that in former years a good deal of the English export was reshipped to America, and so a real decline for the English market was not proven. The best argument of the syndicate was that the German half-products did not constitute more than 3.8 per cent. of the total English consumption.[4]

The complaints against the export policy of the steel works were directed against prices quite as much as quantities. Low export prices have always prevailed in the

---

[1] *Enquete, S.V.*, Anlage 5.

[2] *Ibid.*

[3] Cf. *Ibid.*, pp. 13, 14, 15, 16.

[4] *Ibid.* Anlagen 3 u. 5.

German iron and steel trade.[1] The reports of the German steel companies frequently admit it.[2] There is no question that the export prices of half-products have been very low, but various circumstances must be taken into account in estimating the effects. A good deal depends at what point of delivery or sale the prices are compared, and how the freight is reckoned in making comparisons. The rolling mills are apt to compare prices at the producing mills, while the steel works prefer to compare the prices delivered at the respective places of consumption.[3] Where export bounties are allowed, they must of course be counted in. In order to discuss this question satisfactorily, it would be necessary to know what the export prices really were, for what quantities they applied, and what proportions of the products made therefrom went to different markets where they really met German competition. The theoretical considerations are intricate, while the information as to the facts is totally inadequate, so that it is impossible to make a very confident statement about the real effects of the low export prices. Lippert, a representative of the straight rolling mills, quoted export prices at Antwerp, f. o. b., at 68 m. for ingots, 72 m. for billets, and 72.50 m. for sheet bars as compared with domestic prices of 82.50

---

[1] *Eisen Enquete*, 1878, pp. 13, 44, 56, 72, etc.; *J.-B. Handelskammer*, Breslau, 1892, p. 160; Wieser, p. 318; Martin, p. 183; Raffalovich, *Trusts, Cartels, et Syndicats*, Paris, 1903, p. 21, note, etc.

[2] Cf., *e.g.*, *G-B. Deutsch-Luxemburgische A-G.* 1902–03: "Kaum die Selbstkosten gedeckt werden konnten"; *G-B. Phoenix*, 1901–02: "die Preise äusserst mässig sind, und einen Gewinn ueberhaupt nicht uebrig lassen."

[3] Two calculations may be given for illustration, which were offered at the Enquete concerning the Half-products Syndicate. A. Kirdorf gave the following example. Export price for rolled ingots at works to English mills, 76 m.; freight to seacoast, 3 m.; sea freight, 6 m.; total cost, c. i. f. England, 85 m. Domestic price, delivered, 84 m.; export bounty, 10 m.; total cost, delivered, 74 m. Kirdorf figured for each concern delivered. The German concern which exported its finished product to England still had freight to pay. Springmann made his calculation as follows: Export price for billets, f. o. b. Antwerp, 72 m.; freight from Dortmund (producing works), 5.70 m.; net price at works, 66 m. approx. Domestic price, 90 m.; export bounty, 10 m.; net price at works, 80 m. Springmann figured the price at producing works. *Enquete*, VI., pp. 426, 430.

m., 90 m., and 92.50 respectively.[1] These were emphatically declared by the representatives to be exceptional, if made in fact; and that this was before the present syndicate was established. Schaltenbrand, one of the directors, asserted that the export was necessary, and they had to take what they could get. He admitted that the export prices were a little lower than the domestic prices, but he claimed that, if account were taken of the export bounties and other conditions, the domestic mills received the more favorable terms. He also quoted the real average proceeds from the export trade of the Steel Syndicate for ingots, billets, and sheet bars; but these figures were not printed in the published protocol.[2] Complaints against the steel works have also been made with respect to the prices at which they sold finished products abroad in competition with the domestic consumers of their half-products.[3]

Space does not permit going into further details in regard to this question. It has become chiefly of historical interest in consequence of the recent vigorous *hausse* in the German steel market, which has resulted in the advance of prices all around and brought the export prices, according to market reports, very close to the domestic prices.[4]

In order to equalize the disadvantage at which the German export industry has been placed with respect to manufactured products in consequence of the low export prices of the raw material cartells, export bounties have been paid from time to time by the latter to such of their customers as were engaged in the export trade. This practice extends back to 1891[5] in the iron trade, and perhaps earlier. The significance of the export bounty system naturally became much greater in the period of depression which followed the crisis of 1900, and it was considerably extended. In 1902 it was systematically organized by the establishment of an "Export Accounting Office" (*Abrechnungsstelle für die Ausfuhr*), in which the coal, coke, pig iron, half-products, and beam cartells united to pay export bounties to each other, and to the mills which made and exported the finer products. These bounties were based on a calculation of the amount of raw material consumed in making the finished product.[1] The general principles established for the payment of these bounties were, first, that they were payable only to members of a cartell, and, second, that the raw materials consumed must be supplied exclusively by the cartells paying the bounties.[2] At the beginning of 1904, when the Steel Syndicate commenced operations, the bounties were paid according to the following scale:[3]—

---

[1] *Enquete, S.V.*, p. 17.

[2] *Ibid.*, pp. 10, 18, 20.

[3] Cf. *Ibid.*, pp. 15, 16.

[4] Cf. *Iron and Coal Trades Review*, November 17, 1905, p. 1687.

[5] Raffalovich, p. 23.

1.50 m. per ton of coal.
2.50 m. " " " iron (exclusive coal bounty).
15.00 m. " " " half-products (inclusive coal and iron bounty).
20.00 m. " " " structural steel " " " " " .

Except for a slight reduction of the bounty on half-products for a short time these bounties prevailed through 1904 and 1905.[4] At the end of 1905 the Steel Syndicate decided to grant export bounties only to such cartells as syndicated the foreign as well as the domestic sales, but at the same time they made a very important exception to this, as well as their previous rule; namely, they consented to give a bounty of 7 m. per ton for half-products consumed by the producers of steel bars, although there was no cartell at all in this commodity. This bounty was to begin with the second quarter of 1906. The reason for this exception

[1] *Vide* Walker, p. 223.

[2] Wieser, p. 307; Vogelstein, *S. d. V. f. S.-P.*, pp. 119, 120; *Enquete, S.V.*, p. 431.

[3] *Kartell-Rundschau*, 1904, p. 373; *Enquete, S.V.*, Anlage 3.

[4] *Kartell-Rundschau*, 1904, p. 871; 1905, pp. 145, 318.

was that the establishment of a cartell in bars was deemed practically impossible.[1] If, as has been frequently claimed, there are some influential steel works in the syndicate who have obstructed the formation of a cartell for bars, this measure seems calculated to bring them around somewhat.

In the agreement constituting the Steel Syndicate one of the powers of the Beirat is "the granting of authority to the Vorstand to conclude protective and other agreements." Under this clause the syndicate has made agreements with foreign steel producers, which form a cardinal feature in its policy. Such agreements are by no means an innovation. An international rail pool which existed for a couple of years was dissolved in 1886.[2] In recent years there have been numerous international agreements in the steel trade, as, for example, rails, beams, rods, heavy sheets, wire nails, enamel ware, pig iron, etc.[3] These various cartells include a number of different countries, but particularly Germany's nearest neighbors, France, Belgium, and Austria. The policy of forming international agreements is the logical development of the policy of forming local or domestic agreements, and generally presupposes the latter. In the iron and steel industry combinations of a more or less comprehensive character exist in all the important producing countries, and there is no doubt that the formation of powerful combinations in one country stimulates its rivals to strengthen themselves in a similar manner. To a certain extent, indeed, the formation of the United States Steel Corporation has had an influence in bringing about the formation of the Steel Syndicate in Germany.[4] The establishment of the Steel

---

[1] *Kartell-Rundschau*, 1905, p. 692.

[2] Cf. *Handelskammer zu Bochum*, 1886, p. 13.

[3] Bosselmann, p. 61; Vogelstein, *S. d. V. f. S.-P.*, p. 121; *Kartell-Rundschau*, 1903, p. 47, 1197; *Deutsche Industrie-Zeitung*, August 7, 1903; Wibaût, *Trusts en Kartellen*, Amsterdam, 1903.

[4] Cf. *Gemeinfassliche Darstellung des Hüttenwesens*, Düsseldorf, 1903, p. 120.

Syndicate not only gave the German producers a greater power and prestige in foreign markets, but it also made it possible for them to make advantageous agreements with their rivals for the elimination of competition. The Steel Syndicate promptly availed itself of this opportunity.

A very circumstantial account of certain of these transactions was published in the *Revue économique internationale* for December, 1904, signed by "un industriel belge."[1] According to this authority a meeting was held at Aix-la-Chapelle in June, 1904, which resulted in the formation of an international beam pool between Germany, Belgium, and France, with quotas of 73.45 per cent., 15.05 per cent., and 11.05 per cent., respectively. This agreement was signed on November 24, 1904. It is to terminate on June 30, 1907.[2] Central selling offices were established at Düsseldorf, Brussels, and Paris. Negotiations were being conducted at the same time concerning the formation of an international rail pool, which appears to have been consummated on November 28, 1904, to take effect from October 11, 1904. The countries entering this pool and their quotas were as follows: England, 53½ per cent.; Germany, 28.83 per cent.; Belgium, 17.67 per cent.; and France (which came in later), $\frac{4.8}{104.8}$ for the first year, $\frac{5.8}{105.8}$ for the second, and $\frac{6.4}{106.4}$ for the third. This agreement was to terminate on March 30, 1908.[3] The central bureau was located in London, besides local bureaus for each national group. Since then the chief American rail producers have joined this international pool. The *Berliner Tageblatt* reported this fact on December 1, 1904, the *Deutsche Industrie-Zeitung* alludes to the fact in its issue for January 20, 1905 (stating that the pool had already received numerous orders), and Kollmann states it also in his account of the Steel Syndicate, giving the American members of the pool as the Steel Corporation, the Lackawanna and the Pennsylvania.[1]

---

[1] Le Syndicat International au point de vue belge.

[2] *Cf.* Kollmann, p. 47.

[3] Cf. *Ibid.*, p. 47; *cf.* *** "*La métallurgie française,*" *Revue écon. internat.*, Décembre, 1904.

Information regarding this agreement and the participation of American interests therein was not very generally known outside the trade apparently, so that on July 1, 1905, the New York *Times* came out with head-lines announcing that the European and American producers had divided the world's markets, according to which Central and South America were to be left to the United States,[2] together with other details. Various statements have appeared concerning the terms of the agreement, but none apparently which bear the evidence of complete and authentic information.[3] An article in the *Neue Hamburger Boersen Halle* which seems to have had some special source of inspiration declares that the terms of the agreement, etc., had been kept secret at the express wish of the Americans;[4] and, in this connection, it may be noted that the directors of the Steel Syndicate refused to discuss or divulge their agreements with foreign producers on the ground that they did not feel authorized to reveal the business secrets of their associates.[5] Considering only the aspects of this situation from a German standpoint, it is evident that such agreements are of great significance to the steel trade, and a benefit not only to the German steel trade, but also to the whole national economy. For England, which has been the dumping-ground of all nations, the situation is doubtless more complicated; but for Germany it can hardly be disputed that an arrangement that tended to raise export prices more nearly to a level with domestic prices would be of almost unalloyed advantage. For the straight rolling mills an international pool in half-products would be particularly beneficial; but, although negotiations in this direction are reported, nothing seems to have been accomplished.

---

[1] Kollmann, p. 47.

[2] In the issue of July 2, 1905, it was stated that the American participants were the United States Steel Corporation and the Pennsylvania, Maryland, and Cambria steel companies.

[3] Cf. *Kartell-Rundschau*, 1905, pp. 390, 392, 440; *Deutsche Industrie-Zeitung*, December 9, 1904, p. 432.

[4] Cf. *Kartell-Rundschau*, 1905, pp. 390, 391.

[5] *Enquete, S.V.*, p. 10.

In passing judgment on the Steel Syndicate, it must be borne in mind that it is only a torso until the light rolled products (B-Products) are included in its sales. It is probable that this will be accomplished before long, and it is probable also that the process of concentration will not end at that point. It is possible that something more comprehensive than the United States Steel Corporation, though not as large, may be the final result. According to the prevailing German view of industrial organization, combinations, like men, may be "good" or "bad," according as they conduct themselves. Up to the present the Steel Syndicate should be classed, on the whole, as a "good" combination; but it has yet to endure a serious ordeal, although the present *hausse* may show whether it possesses the most difficult and most valuable of cartell virtues,—moderation.

FRANCIS WALKER.

WASHINGTON, February 26, 1906.